

19991120.qrp v01_n645.qrl.991120

Date: Sat, 20 Nov 1999 19:03:10 EST

From: qrp-l@Lehigh.EDU

To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>

Subject: QRP-L digest 1645

QRP-L Digest 1645

Topics covered in this issue include:

- 1) [56377] PROP: Weekend forecast
by "Paul Harden, NA5N" <na5n@rt66.com>
- 2) [56378] W6MMA PW-1 Portable antenna
by "Bob White" <bobwhite@innercite.com>
- 3) [56379] Re: Tuna Tin 2 -- really cooking now -- 4 states last night
by "T.J. \"SKIP\" Arey N2EI" <tjarey@home.com>
- 4) [56380] harmonic measurements
by Anthony Felino <anthony@pacinfosb.com>
- 5) [56381] WTB:Johnson Matchbox
by "Wilford D. Lindsey" <70511.3041@compuserve.com>
- 6) [56382] Re: Logarithms and QRP
by "K7FD-N7SG" <cqdx@teleport.com>
- 7) [56383] QRP ARCI has new President
by Mark Milburn <markmilburn@netzero.net>
- 8) [56384] Re: ADMIN: Please update the list.
by Jim Stafford <w4qo@amsat.org>
- 9) [56385] Tuna Tin Happy Dance
by "T.J. \"SKIP\" Arey N2EI" <tjarey@home.com>
- 10) [56386] logarithmss in your head...
by Jeff Furman <jfurman@ocs.net>
- 11) [56387] WTB...QRP++
by K4NK@aol.com
- 12) [56388] Changing of the guard
by K4NK@aol.com
- 13) [56389] FOXHUNT:Team Scores
by Bruce Rattray <rattray@gpfn.sk.ca>
- 14) [56390] Re: [Fwd: Antenna notes]
by Charles Greene <cgreene@loa.com>
- 15) [56391] tubes for sale
by neil <neil@aade.com>
- 16) [56392] Using Power MOSFET to control motor
by Scott Gregson - KC7MAS <emtech@steadynet.com>
- 17) [56393] Re: Using Power MOSFET to control motor
by Jim <w7ls@blarg.net>
- 18) [56394] Air Core Balun...thanks for responses
by WB9MII@aol.com
- 19) [56395] Harvey Wells Antenna Tuner

- by "jmb" <jmb@cruzio.com>
- 20) [56396] SWAP...VHF for QRP
by K4NK@aol.com
- 21) [56397] Paper logging
by N10DL@aol.com
- 22) [56398] i am testing on 40..
by sergio <sruiz@bright.net>
- 23) [56399] My New Wal-Mart Deep Cycle Battery Power Supply.
by "Ronald H. Evans" <rhevans@mindspring.com>
- 24) [56400] Re: Paper logging
by "Ron Smith" <resmith666@uswest.net>
- 25) [56401] Re: Elmer 100: Continous Ham Radio Education (rather long)
by Jim Durkin <jimdurkin@yahoo.com>
- 26) [56402] Re: [Admin] Leaving town.....
by martyw@tn.freei.net (Marty Watt)
- 27) [56403] Re: Info on The CTHA?
by k5zty@juno.com
- 28) [56404] Re: Using Power MOSFET to control motor
by Scott Gregson - KC7MAS <emtech@steadynet.com>
- 29) [56405] Re: My New Wal-Mart Deep Cycle Battery Power Supply.
by Glen Reid <k5fx@flash.net>
- 30) [56406] 2n2/40 parts substitution question
by "T.J. \"SKIP\" Arey N2EI" <tjarey@home.com>
- 31) [56407] Re: Paper logging > www.fists.org
by Hank Kohl K8DD <k8dd@arrl.net>
- 32) [56408] Re: 2n2/40 parts substitution question
by "John J. McDonough" <jjmcd@tm.net>
- 33) [56409] WTB: Super CMOS 3 Keyer kit
by KF4EIB@aol.com
- 34) [56410] N4UY on his "Tuna Tin 2"
by kc8aon@juno.com
- 35) [56411] Re: My New Wal-Mart Deep Cycle Battery Power Supply.
by kc8aon@juno.com
- 36) [56412] Z- match verses T- match
by kc8aon@juno.com
- 37) [56413] stupid contest question..
by sergio <sruiz@bright.net>
- 38) [56414] source needed for 16+ MHZ xtals.
by Mighty Mik <mitymik@wenet.net>
- 39) [56415] Re: WTB: Super CMOS 3 Keyer kit
by k5zty@juno.com
- 40) [56416] Re: Z- match verses T- match
by k5zty@juno.com
- 41) [56417] ELMER101: ElmeRadio Update
by Bruce Kizerian <kizerian@ced.utah.edu>
- 42) [56418] Re: Z- match verses T- match
by "George Heron N2APB" <n2apb@erols.com>
- 43) [56419] Re: Logarithms and QRP

- by Russ Hines <radioruss@fuse.net>
44) [56420] Sweepstakes contest software//HELP
by BOB0B0B1@aol.com
45) [56421] More SWAP for QRP
by K4NK@aol.com
46) [56422] Leader LB0-516 manual
by Dana E Hager <dehager@ix.netcom.com>
47) [56423] Sweepstakes Software!! Thank you!
by BOB0B0B1@aol.com
48) [56424] More Mr. Microphone stuff
by Nils R Young <nilsbull@juno.com>
49) [56425] WTB small DPDT relays
by James Skalski <jskalski@localnet.com>

Date: Fri, 19 Nov 1999 17:46:19 -0700 (MST)
From: "Paul Harden, NA5N" <na5n@rt66.com>
To: qrp-l@lehigh.edu
Subject: [56377] PROP: Weekend forecast
Message-ID: <Pine.SUN.4.10.9911191731210.10587-1000000@shell.rt66.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Gang,

This has been the most active week on the sun this solar cycle, although it did not produce a major X-class flare, just a bunch of M-class flares. Today was rather quiet, but 3 regions on the sun continue to have strong and complex magnetic properties ... signs that major flares may yet occur.

The big M7 flare on tuesday hurled tons of mass out into space, now riding along with the solar wind. It has not yet hit the earth, and we're in the critical window for it right now. In other words, if it's going to hit us, it will probably do so some time this evening (friday evening). Otherwise, we will have somehow missed it. If it does hit us, it will likely produce many hours of very disturbed HF conditions in the form of a MINOR geomagnetic storm, if not more severe. This will effect primarily 40M and 80M, with a lesser effect noted on 30 and 20M.

The solar flux remains in the 200's, which means plenty of potential this weekend for DX propagation on 15M and 10M.

If a major flare erupts on the sun this weekend, it will be early next week before it reaches us, keeping the weekend fairly nice ... especially on the higher bands.

So ... work the higher bands where the high solar flux is making the ionosphere very reflective to 15 and 10M signals during daylight hours, and slightly beyond for 15M. And beware of periods of noisy conditions on 40M.

Have a good weekend,
72, Paul NA5N

On Fri, 19 Nov 1999, Space Environment Center wrote:

> JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
> SDF NUMBER 323 ISSUED AT 2200Z ON 19 NOV 1999

> IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 18/2100Z
> TO 19/2100Z: SOLAR ACTIVITY WAS LOW.
> A LARGE FILAMENT/PROMINENCE IN THE SOUTHWEST HAS ERUPTED.

While not a flare, this is a form of CME ... a coronal mass ejection, spewing out solar material into space. It does not appear, from it's position, it will bother the earth. However, it could "die out" and become a coronal hole, which could cause geomagnetic disturbances mid-late next week.

> IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE
> MODERATE TO HIGH. MAJOR FLARES ARE POSSIBLE FROM REGIONS 8765 (S12
> W34), REGION 8766 (N17 W11), AND REGION 8771 (S15E28).

These are the areas of high magnetic fields (gamma and delta groups) that generally signify major activity is highly probable.

> IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 18/2100Z TO 19/2100Z:
> THE GEOMAGNETIC FIELD WAS BASICALLY UNSETTLED FOR THE PAST 24 HOURS.

> IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD EXPECTED
> TO BE UNSETTELED TO ACTIVE. THERE IS EVIDENCE IN THE SOLAR WIND
> DATA FROM THE ACE SPACECRAFT OF A DISTURBANCE IN THE SOLAR WIND
> WHICH MAY IMPACT THE EARTH.

> IV. PENTICTON 10.7 CM FLUX
> OBSERVED 19 NOV 210 <--- remember a year ago when it was 100?
> PREDICTED 20 NOV-22 NOV 205/200/200
> 90 DAY MEAN 19 NOV 167

> V. GEOMAGNETIC A INDICES
> OBSERVED AFR/AP 18 NOV 008/012 <--- unsettled to active levels
> ESTIMATED AFR/AP 19 NOV 010/012
> PREDICTED AFR/AP 20 NOV-22 NOV 020/020-015/012-005/010

^^^^^^ ^^^^^^

If the solar wind shock wave from
tuesday's M7 (see IIB above) hits us,
the A-index will likely be 30-50, or
in the storm-level regions.

Date: Fri, 19 Nov 1999 16:45:34 -0000
From: "Bob White" <bobwhite@innercite.com>
To: <qrp-1@lehigh.edu>
Subject: [56378] W6MMA PW-1 Portable antenna
Message-ID: <00af01bf32ad\$8058d6a0\$3d72b89e@ssd.loral.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I just put a picture on my web page of the broken down PW-1 Portable antenna
sitting in front of my K2.

<http://www.geocities.com/SiliconValley/5582>

Notice that the coil slider matches the color of the K2. There are five one
foot whip pieces and a thicker one foot long coil mounting rod. As pictured
the slider is set on the coil for 10 meters, (28715 of course), but it is
tunable 40 meters through 10 meters. The base mounting plate moves in
several directions to allow easy mounting to just about anything. Not
pictured is a small C clamp used to attach the mounting bracket to a
railing, chair, etc.

73,
Bob W03B

Date: Fri, 19 Nov 1999 20:01:04 -0500
From: "T.J. \"SKIP\" Arey N2EI" <tjarey@home.com>
To: njqrp@njqrp.org
Cc: "qrp-1@Lehigh.EDU" <qrp-1@Lehigh.EDU>
Subject: [56379] Re: Tuna Tin 2 -- really cooking now -- 4 states last night

Message-ID: <3835F2D0.DD1BE201@home.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

If I can clear a few things off my desk I'll try to meet you around then
and we can try for a TT2 to TT2 contact.

"John L. \"Jake\" Carter" wrote:

>
> My Tuna Tin 2 is really cooking -- worked MA, IL, OH and SC last night.
> Good solid QSOs with MA and IL. QRM overpowered my TT2 for a while
> (cut the OH and SC QSOs short), but, all things considered, it was a
> good night.
>
> I'm usually on between 9:30 and 10:30 pm EST at 7.042 Mhz -- monitoring
> the freq while I work on my latest project -- the G3RJV "weekender"
> series of kits. If the frequency is clear I call CQ -- see you there.
>
> 72,
>
> Jake -- N4UY
> Vienna, VA (Wash DC suburbs)
>
> ===== NJ QRP Club Mailing List =====
> To unsubscribe from this list, send email to listserver@vramp.net
> and put the text "unsubscribe njqrp" in the message. To post a
> message to the list, send email to njqrp@njqrp.org.

--

+++++

T.J. "SKIP" AREY N2EI e-mail tjarey@home.com

Website <http://members.home.net/tjarey>

Snail Mail: PO Box 236, Beverly, NJ 08010

Specialization is for insects! LAZARUS LONG

Date: Fri, 19 Nov 99 16:37:50 -0800
From: Anthony Felino <anthony@pacinfosb.com>
To: n5ib@juno.com, qrp-1@lehigh.edu
Subject: [56380] harmonic measurements
Message-ID: <Chameleon.943060650.anthony@anthony>
MIME-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

>Can anyone suggest a procedure for obtaining at least a rough
>quantitative idea of the spectral purity of a homebrewed transmitter -
>for someone without access to a spectrum analyzer.

Jim,

You have everything you need. Run transmitter into dummy load. Across the room, put a dummy load on a receiver. Attach a short wire to the hot side of each dummy load. (If you use BNC hardware a T adapter with some wire stuck in the socket works.) Tune receiver to harmonic and record S meter reading with the transmitter running. Connect signal generator/attenuator to transmit dummy load/wire in place of the transmitter. Tune signal generator to harmonic frequency and adjust attenuator for same S meter reading on receiver. Measure input to transmit dummy load with scope. That is the voltage presented to the dummy load by the transmitter on that harmonic. The rest is just the standard arithmetic.

Here you are using your receiver as a sensitive frequency selective voltmeter, calibrated by the gen/att/scope combo. The loads and wires serve as an attenuator. Errors in the system include energy traveling up the power line to the receiver and other leakages, but these errors tend to show more harmonic energy than is really there. So if you come up with -25dB you know that it's probably better than that.

This assumes that your scope and receiver can see high frequencies. You would need a 100MHz scope to measure the 3rd harmonic on 10m. An HF receiver won't do you much good above 20m, but lots of the newer VHF rigs have wideband receive. If you are lucky to have a real signal generator with a calibrated attenuator, you are in luck 'cause you don't need the scope. You can make wideband amps and detectors and calibrate them if you have short-term access to such a generator, in which case you don't need the scope.

I'm sure something like this was how they did it in the old days, which is probably why you always see a rack-mounted Super Pro or something in old photos of radio labs. It's also a good reason to be upset about the new "wideband" general coverage receivers that are cellular blocked. I use an Icom IC-R10 which is very portable and goes up to

1.2GHz or something. It is easily unblocked to cover the full range. A general coverage receiver is the handiest piece of gear for making radios.

I know this is real crude, but it's kinda fun.

73,
WN6Q

Anthony Felino, Pacific Information Design
email: anthony@pacinfosb.com
telephone: (805) 730 1565, x25

Date: Fri, 19 Nov 1999 20:43:49 -0500
From: "Wilford D. Lindsey" <70511.3041@compuserve.com>
To: QRP-L Discussion Group <QRP-L@Lehigh.edu>
Cc: "W.D.(Doc)Lindsey/K0EVZ" <70511.3041@compuserve.com>
Subject: [56381] WTB:Johnson Matchbox
Message-ID: <199911192045_MC2-8DD9-B457@compuserve.com>
MIME-Version: 1.0
Content-Transfer-Encoding: 7bit
Content-Type: text/plain;
 charset=us-ascii
Content-Disposition: inline

Gang:

Looking to buy a Johnson Matchbox tuner. If you have one in excellent condition to sell, please let me know. Will make it worth your while :-).

72,
--Doc Lindsey/K0EVZ
 DSBF
 PO BOX 6028
 Bismarck, ND 58506
 K0EVZ@arrl.net

Date: Fri, 19 Nov 1999 17:45:35 -0800
From: "K7FD-N7SG" <cqdx@teleport.com>
To: <we6w@qsl.net>, "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [56382] Re: Logarithms and QRP
Message-ID: <003001bf32f9\$d1d7f5a0\$4a231ad8@default>

MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Ed! And I thought I had too much time on my hands! ;)

72 John K7FD

>I got enough requests for the Square Root formula (Long-hand)

>

>

>Sure. Here's the square root algorithm as I remember it.

>

>

>Let's do the Sqrt(15). First guess is it is >3 and less
>than 4. Enter 3 in two places. Underline every pair of
>digits to the right and left of the decimal. These are used
>together. Multiply 3*3=9. Subtract the 9 from 15 and get
>6. Carry down the next 2 digits.

>

> -----
> __ (15).00,00,00

>

> 3.

>

> -----
> 3_| (15).00,00,00

> 9

>

> ----
> | 600

>

>

>PHASE 2) Double the top 3 and add placeholder to the right of
>this number. (next to the 600 on the last line.) This number
>will be 60, 61, 62... 69 etc. whatever digit goes next
>to the "3.?" at the top will be carried to the right of the
>"6_". So if your guess is a 4, then you will have 64 to the
>left of the 600. Use the 4 to multiply by 64 and see if it is
>the greatest number not over 600? Nope. it is 256. try again.
>How about a 9? NOPE 9*69=621. How about an 8? 8*68=544. OK!
>Log it in the math below:

>

>

> 3._

>

> -----
> 3_| (15).00,00,00

```

>          9
>      ----
>    6_ | 600
>
>
>          3.8
>      -----
>    3_ | (15).00,00,00
>          9
>      ----
>    68 | 600
>       -544
>       ----
>    76_ | 5600    <Double the 3.8 and carry down the next 2 digits.
>
> Find that 7*767 is the greatest to fit 5600 without going over.
> Scribe the 7 after 3.8 thereby giving 3.87 and scribe the 7 after
> the 76 to equal 767. 7*767=5369
>
>
>CONTINUED:
>
>          3.87
>      -----
>    3_ | (15).00,00,00
>          9
>      ----
>    68 | 600
>       -544
>       ----
>    767 | 5600
>         -5369
>         -----
>    774_ | 231,00    <=== Carry down next 2 digits from top.
>
>Double 387 above, and place it to left of 23100 and add placeholder
>digit.
>
>Continue to as many places as needed.
>
>So far, the SQRT(15) is 3.87
>
>OK!
>
>Hope y'all enjoyed that one.
>
>
>72/Ed we6w

```

>
>
>--
>-72/Ed WE6W; AR Millennium Q's=> 2241/2000 A-1 OP
> <http://www.qsl.net/we6w> Santa Rosa, CA
>QRP-Z#106 AR#112 HI-QRP#64 ARCI#9397 ARS#275 QRP-L#1068 Old NC#2227
>

Date: Fri, 19 Nov 1999 20:05:06 -0600
From: Mark Milburn <markmilburn@netzero.net>
To: QRP-L <qrp-l@lehigh.edu>
Subject: [56383] QRP ARCI has new President
Message-ID: <383601D2.897EFBA9@netzero.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

President Mike Czuhajewski, WA8MCQ, citing increased responsibilities and work load, has announced that he will not be able to continue as President of QRP ARCI. Mike has been a member of QRP ARCI since 1967 and has served in many capacities including that of President since 1997. Some of his accomplishments with the Club have been the long running Idea Exchange in the club Quarterly. He has also served as Board member and Vice President. While president, Mike oversaw the growth of the Quarterly, a strong financial balance sheet, and a solid effort at the Dayton Hamvention by the club. He also brought back the Club's Hall of Fame program, adding 10+ members, and the Quality Recognition Program was implemented during his term.

Vice President Jim Stafford, W4Q0, has been named President by the Board of Directors. Jim has been a member of QRP ARCI since 1990 and has also served in many capacities within the club, the latest as Vice President for the past 2 1/2 years following a stint as Director. He has been active in promoting QRP ARCI at hamfests, especially Dayton/FDIM since its first year and has always been a positive force for moving QRP ARCI into the future. He is a charter member of the North Georgia QRP Club, as well as

many other QRP organizations. Jim was also the 1992 Herb S. Brier Instructor of the Year for the ARRL, based on his work with school radio clubs in the North Georgia area. He is retired from BellSouth but owns a small but growing woodworking business.

QRP ARCI has been very fortunate over the years to attract high caliber hams to leadership positions. We are grateful for the contributions each of them has made, and we thank Mike for the years of leadership he has given the club. Although no longer President, we know that Mike will be an active supporter and advisor for the club in the future. At the same time, we are grateful to Jim for stepping up and assuming the Presidency at this time of growth and change in our hobby. It will be quite a challenge and we look forward to working with Jim as we move ahead.

Mark Milburn, KQ0I
Secretary/Treasurer
QRP Amateur Radio Club International, Inc.

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Date: Fri, 19 Nov 1999 21:11:44 -0500
From: Jim Stafford <w4qo@amsat.org>
To: qrp-l@Lehigh.EDU
Subject: [56384] Re: ADMIN: Please update the list.
Message-ID: <38360360.DD6406A3@amsat.org>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

My discussions with Steve H lead me to believe that he will not put the web site back up, nor is he interested in moving the web pages to other sites.

I have tried to replicate a lot of what I remember being on Steve's site and have posted here before that you may find it at:
<http://www.qrparci.org/qrplacc.htm>

I will be more than happy to post other information as you may remember. Just send along any hints/thoughts. A URL has also been reserved if it appears we need to "energize it".

Again, if anyone can find something I have left off qrp-parci's qrp-1 information page, I will gladly post it, especially if you can point me to any links that were there on Steve's site.

Does anyone have the LOGO? Never thought to capture it. If you have a .jpg or .gif of it, could you send it along?

Jim, W4QO

w4qo@arrl.net

Date: Fri, 19 Nov 1999 21:42:14 -0500
From: "T.J. \"SKIP\" Arey N2EI" <tjarey@home.com>
To: njqrp@njqrp.org
Cc: "qrp-1@Lehigh.EDU" <qrp-1@Lehigh.EDU>
Subject: [56385] Tuna Tin Happy Dance
Message-ID: <38360A86.B62E5B2E@home.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Just worked Jake N4UY TT2 to TT2!!!!!!

Thank you W1FB wherever you are!!!

My set up for this, and most of my TT2 contacts, is the standard TT2 kit from NJQRP running with my Small Wonder Labs SW-40+ into a multiband dipole @35'. The whole ball-o-wax is powered by my Jumper 850 Gell Cell pack

--

+++++

T.J. "SKIP" AREY N2EI e-mail tjarey@home.com

Website <http://members.home.net/tjarey>

Snail Mail: PO Box 236, Beverly, NJ 08010

Specialization is for insects! LAZARUS LONG

Date: Fri, 19 Nov 1999 18:46:15 -0800 (PST)
From: Jeff Furman <jfurman@ocs.net>
To: we6w@qsl.net
Cc: qrp-l@lehigh.edu
Subject: [56386] logarithmss in your head...
Message-ID: <Pine.LNX.4.04.9911191729070.26304-1000000@ocs.net>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Ed, this sequence may be familiar to you:

10, 11, 12, 13, 15, 16, 18, 20, 22, 24, 27, 30, 33, 36, 39, 43, 47, 51, 56, 62, 68, 75, 82, 91, 100.

It's the 5% EIA component value series, also called R24 series. The 10% series, R12, is every other value, starting at 10. Since these are exponential series, when they are plotted on a linear scale-- R24 values spaced at equidistant intervals, you get a crude logarithmic scale, just like the C or D slide rule scales. Put this against the same scale labelled with the linear spacing 1/24 per division (0, 1/24, 1/12, 1/8, 1/6, 5/24, ...) , you get logarithms to almost two figures. In the middle, for example, 1/2 is mapped to 33, we want to call this 31.6, so you can see it's crude. ($10^{1/2} = 3.16$, or $\log 3.16 = 1/2$) As in using a sliderule, you are responsible for the decimal point. This is an old idea, it was even copywrited with permission granted to ARRL to publish an article on reactance charts so labelled. One nice thing about that is every grid point on the chart is actually available component values. Labelling quadrille paper with R12 or R24 sequences gives you impromptu log scales handy for sketching the all important bode plots, etc.

Another scheme is remembering a few key logarithms and doing simple arithmetic to get others: we need to remember $\log 2 = 0.3$ then we can derive $\log 5 = \log (10/2) = \log 10 - \log 2 = 1 - 0.3 = 0.7$ we use an approximation to get $\log 7$: 49 is almost 50, we know $\log 50 = 1.7$ from above ($\log 50 = \log(10 \times 5) = \log 10 + \log 5 = 1 + \log 5 = 1.7$); the square root of 49 is 7, so, $(1/2) \times \log 50 = 1.7/2 = 0.85$ close to $\log 7 = 0.845$ by calculator. The logarithms of small integers are derived using such tricks-- is $\log 3 = 0.5$ close enough, or can we derive a better value built up from earlier results? One can burn up idle time doodling these derivations on junk mail envelope backs...

I hope this isn't too boring...

73, Jeff KD6MNP

Date: Fri, 19 Nov 1999 22:03:23 EST
From: K4NK@aol.com
To: qrp-1@lehigh.edu
Subject: [56387] WTB...QRP++
Message-ID: <0.655c5699.2567697b@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

Gang;

I am looking to buy a extra nice QRP++. Willing to pay a fair and reasonable price. Please e-mail me if you have one for sale.

Also looking for a unbuilt kit to keep me busy this winter...any thing except 40 meters..Hi got a dozen for that band.

72 Les K4NK

Please E-mail direct.

Date: Fri, 19 Nov 1999 22:10:49 EST
From: K4NK@aol.com
To: qrp-1@lehigh.edu
Subject: [56388] Changing of the guard
Message-ID: <0.8761399c.25676b39@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

Congratulations to Jim Stafford as he takes the presidency of ARCI . I urge all members to give him your support. And, many thanks to mike for the many years of service to the club. The leadership team of ARCI QRP are members just like your self who give their time to help the club grow and prosper. I would like to thank them all for their services.

Les Shattuck K4NK

Past President ARCI QRP

Date: Fri, 19 Nov 1999 21:15:40 -0600 (CST)
From: Bruce Rattray <rattray@gpfn.sk.ca>
To: QRP-Canada <qrp-canada@lists.gpfn.sk.ca>, Low Power Group <qrp-1@LeHigh.EDU>

Subject: [56389] FOXHUNT:Team Scores
Message-ID: <Pine.LNX.3.95.991119211350.7108A-1000000@neale.gpfn.sk.ca>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

...missed N2T0.....my apologies!....

.72/73 - Bruce (VE5RC+VE5QRP) QRP-C#1 QRP-L#886 ARCI#9683 Zombie#272
A-1 Operator Club - 10/10# 944 - 128 Durham Drive, Regina, SK.,
S4S-4Z2, Canada-AR Stamp Collector- "QRP! How sweet it is!"
"I am da man wit "DAH" paddle!"

..DON'T FORGET FOXII, SEND YOUR "FINAL LOG" TO ME AS WELL
AS TO PAUL...that will be a big help...thank you all....

Fox Hunt #7 -W8RU -

20th. MAINE BENGAL BEARS:Total=4 BLUE J's:Total=3

Jim - N5IB
Butch - N5SMQ
Bill - NT1R <-
Joel - KE1LA

John - VE3JC
Jim - VE6JWA
Jeff - VA3JFF
Jon - TF3JA

DURHAM MORSE MEN:Total=0

Jim - VE3KQN
Ken - VE3ELA
John - VA3JE
Garry - VE3REP

EMPIRE HOUNDS:Total=6

Dick - K2REB <-
Kevin - N2T0 <-
Mark - N2JTW <-
Nick - KF2PH

HOUSTON HOUNDS:Total=22 "SWEEP!"

Bill - K5ZTY <-
Bill - W5SB <-
Terry - KQ5U <-
Dan - KK5LD <-

MANGY MUSHERS:Total=14

Pete - NV4V
Paul - VE7CQK
Bruce - N7RR <-
Ed - K1VP <-

NIGHT OWLS:Total=9

Ed - WE6W <-
Rich - N5JI

OKLAHOMA TORNADOS:Total=16

Cliff - AB5UA <-
Royce - KE5TC <-

Dan - N7CQR <-
Ben - NW7DX

Don - K5AAR <-
Gody - AC6U

RAIDERS OF THE LOST RF:Total=10

SCATTER SHOT GUNNERS:Total=15

Fred - VE3FAL
Earl - VE6EWM <-
Mary - NA6E
Bruce - VE5RC <-

Mike - K1MG <-
Jack - W5TFB <-
Stan - N6XU
Pat - K0PC

SFBA FOGHORNS:Total=5

SWAMP RATS:Total=18 "SWEEP!"

Bob - N6WG <-
Conrad - NN6CW
Andreas - N6NU
Allan - K7GT

Tom - N1TP <-
Mac - AF4PS <-
Fred - W2XN <-
Paul - AJ4Y <-

SWORDS:Total=12

TEAM CRAMP.COM:Total=14

Rick - WB6JBM
Andy - KC8KFI
Doc - K0EVZ <-
Dan - N8IE <-

OJ - K10J
George - K5VUU <-
Mike - K5NZ <-
Eric - NM5M

TEAM ScQRPion:Total=17

TESLA'S TERRORS:Total=26 "SWEEP!"

Floyd - NQ7X <-
Gary - AB7MY
Conard - WS4S <-
Bob - KI7MN <-

Wayne - N0EA <-
Dan - N0DT <-
Tim - N0EHW <-
Joe - W0JOE <-

TEXAS TARANTULAS:Total=20 "SWEEP!"

UNDERDOGS:Total=22 "SWEEP!"

Bill - K5LN <-
Dave - N5IW <-
Bob - AF5Z <-
Tom - N5TW <-

Roy - AB7CE <-
Dan - N4ROA <-
Brian - KB9BVN <-
Ron - KI0II <-

WESTERN WRANGLERS:Total=8

NORTEX Irregulars:Total=2

Randy - K7TQ
Chuck - K7QO
Steve - WW7Y <-
Ron - KU7Y <-

Doc - W5TB <-
Joe - KK5NA
Don - N5YAK
Barb - KK5QA

...72 - Bruce(VE5RC+VE5QRP)

Date: Fri, 19 Nov 1999 21:50:13 -0500
From: Charles Greene <cgreene@loa.com>
To: aa4xx@ipass.net, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [56390] Re: [Fwd: Antenna notes]
Message-ID: <4.1.19991119211802.0099e7b0@mail.loa.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

At 06:53 PM 11/19/99 -0500, Paul Stroud wrote:

>Hi Gang,

>

>I received several thoughtful responses to a recent posting concerning
>the need--or lack thereof--for a radial system for a 1/2 wave base

>loaded (beach mounted) 20M vertical. N3G0's response was especially
>insightful, and he kindly gave permission for me to pass it along to you
>all. Thanks, Gary! 72, Paul AA4XX

To add to N3G0's excellent response, in an appendix to the book
"Building and Using Baluns and Ununs" by Jerry Sevick W2FMI, is
a reprint of an article appearing several years ago in QST entitled
"Ground-Radial System for Verticals" In the article, Jerry describes
tests he conducted of radials for 1/4 and 5/8 wavelength antennas.
His tests show a 3 dB improvement with 10 .4 wavelength radials
over the same vertical with no radials, and another 1 dB with 40 radials.
The 5/8 wave length antenna showed a gain of 3 to 4.5 dB over the 1/4
wavelength vertical at angles below 3 degrees, over the same radial
field. However, on the air tests showed the 1/4 vertical performed just as
well as the 5/8 wavelength antenna.

I would like to make two points. For a 1/4 vertical to perform properly,
it needs a large number of radials. It appears to me that for the average
ham that doesn't want to put in the necessary radials, the 1/2 wave length
antenna may outperform the 1/4 vertical. I have a Hustler 6BTV with
480' of varying lengths of radials, but according to the tests made, I have
less than half enough. I believe the Cushcraft R5 and R7 series are
electrical half wave antennas, and as such, require very few radials; just
enough to decouple the coax. I wonder how they perform during
on-the-air tests, vs the 1/4 wave vertical?

Try PSK31. Check: <http://aintel.bi.ehu.es/psk31.html>
and May 99 QST. K2 S/N 462.

Chas, W1CG

Rhode Island TCPIP Address Coordinator
w1cg@arrl.net

Date: Fri, 19 Nov 1999 20:26:52 -0800
From: neil <neil@aade.com>
To: "baswaplist@foothill.net" <baswaplist@foothill.net>, "boatanchors@qth.net" <boatanchors@qth.net>, For Sale - Swap List <forsale-swap@qth.net>, Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [56391] tubes for sale
Message-ID: <3836230C.D7DD0653@aade.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Micronetics of Geneve Switzerland has a lot of new tubes for sale at prices so low that they very competitive even after adding shipping from

Switzerland. They are normally a wholesaler so they do not post prices but will quote a price for one or more of a type for you quickly via e-mail.

The inventory is available on my web site at:
<http://www.aade.com/tubes/tubes.htm>

They have many receiving tubes, Hi-Fi power tubes, transmitting tubes, CRTs and even TV camera tubes.
For example CRTs are \$5 each regardless of type.

I am not affiliated with Micronetics and host their inventory as a service to the hobby and to draw people to my web site.

All questions, order, and payments should be made directly to Micronetics.

--

Neil
<http://www.aade.com>

--

Neil
<http://www.aade.com>
<mailto:neil@aade.com>
Almost All Digital Electronics
1412 Elm St. SE
Auburn, WA 98092
253-351-9316

Date: Fri, 19 Nov 1999 22:08:10 -0800
From: Scott Gregson - KC7MAS <emtech@steadynet.com>
To: qrp-1 <qrp-1@lehigh.edu>
Subject: [56392] Using Power MOSFET to control motor
Message-ID: <38363ACA.F17E6203@steadynet.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Man sometimes you work something to death and still don't get it done.

I am trying to get a motor to shut off when the voltage coming from the battery gets too low (~8 volts). I talked with my friend Stan Yarema, and he gave me some very good ideas. What we came up with works - sort of, but it isn't really the result I need.

What I did was hook up an op-amp as a comparator. Used a 78L05 to provide the reference voltage, and a dividing circuit to lower the signal from the battery. I then took the output from the op-amp to the gate of a IRF510. This works, but... the output from the op-amp drops in proportion to the signal, I need it to drop down below 3 volts in maybe a second. I tried the recommended hysteresis stuff from the application data. I tried a dividing circuit on the output, still takes a couple of minutes for the motor to stall. I say it "stalls" because it really is still getting some power, and the MOSFET is getting warm about then as it dissipates the heat. Basically this goes on until the MOSFET dissipates enough of the remaining battery voltage to really turn itself off.

I also tried a LM311, a "real" comparator, but unfortunately it doesn't provide an output voltage, but an open collector, so there is no way to trigger the MOSFET in the first place without a whole bunch more components, I have limited space in this application.

The Op-amp I used was 1/4th of a MC3404. That is a quad 741 type op-amp. Also tried a TL082 - no worky.

This whole thing is run off the battery that is being monitored, so I don't have a -V source with building a voltage pump circuit. I think if I did that, I think that the 741 type op-amp would swing down faster.

There are some push-pull output comparators, but the one I found are packaged for surface mount, I need thru-hole.

Any ideas?

--

Scott Gregson - KC7MAS
emtech@steadynet.com
<http://emtech.steadynet.com>
+++++
Scott Gregson Co. / Emtech / CFC
1127 Poindexter Ave W
Bremerton, WA 98312

Date: Fri, 19 Nov 1999 22:15:01 -0800
From: Jim <w7ls@blarg.net>
To: emtech@steadynet.com, qrp-1@lehigh.edu
Subject: [56393] Re: Using Power MOSFET to control motor
Message-ID: <38363C65.F7565D6D@blarg.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Scott,

You might look at the Motorola MC34164 low voltage reset chip for microprocessors. It might just work for what you are trying to do. It is a 3 terminal TO-92 package that holds one pin low until the top pin 'sees' at least 4.5 volts or something like that. It then releases the floating pin to go high. You could run the juice to it with a resistor and zener to keep it at a max of 5v and use the reset pin to operate a VMOS power fet or something like that. Might have to jockey the voltages a bit with resistors and such, but it's a start.....

Jim W7LS

Scott Gregson - KC7MAS wrote:

> Man sometimes you work something to death and still don't get it done.
>
> I am trying to get a motor to shut off when the voltage coming from the
> battery gets too low (~8 volts). I talked with my friend Stan Yarema,
> and he gave me some very good ideas. What we came up with works - sort
> of, but it isn't really the result I need.
>
> What I did was hook up an op-amp as a comparator. Used a 78L05 to
> provide the reference voltage, and a dividing circuit to lower the
> signal from the battery. I then took the output from the op-amp to the
> gate of a IRF510. This works, but... the output from the op-amp drops
> in proportion to the signal, I need it to drop down below 3 volts in
> maybe a second. I tried the recommended hysteresis stuff from the
> application data. I tried a dividing circuit on the output, still takes
> a couple of minutes for the motor to stall. I say it "stalls" because

> it really is still getting some power, and the MOSFET is getting warm
> about then as it dissipates the heat. Basically this goes on until the
> MOSFET dissipates enough of the remaining battery voltage to really turn
> itself off.
>
> I also tried a LM311, a "real" comparator, but unfortunately it doesn't
> provide an output voltage, but an open collector, so there is no way to
> trigger the MOSFET in the first place without a whole bunch more
> components, I have limited space in this application.
>
> The Op-amp I used was 1/4th of a MC3404. That is a quad 741 type
> op-amp. Also tried a TL082 - no worky.
>
> This whole thing is run off the battery that is being monitored, so I
> don't have a -V source with building a voltage pump circuit. I think if
> I did that, I think that the 741 type op-amp would swing down faster.
>
> There are some push-pull output comparators, but the one I found are
> packaged for surface mount, I need thru-hole.
>
> Any ideas?
> --
> Scott Gregson - KC7MAS
> emtech@steadynet.com
> <http://emtech.steadynet.com>
> ++++++
> Scott Gregson Co. / Emtech / CFC
> 1127 Poindexter Ave W
> Bremerton, WA 98312

Date: Sat, 20 Nov 1999 02:15:37 EST
From: WB9MII@aol.com
To: qrp-1@lehigh.edu
Subject: [56394] Air Core Balun...thanks for responses
Message-ID: <0.c99455a2.2567a499@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

Once again the gang on qrp-1 comes through...thanks folks.
72
Greg WB9MII

Date: Sat, 20 Nov 1999 07:00:59 -0800
From: "jmb" <jmb@cruzio.com>
To: "QRP-1" <qrp-1@lehigh.edu>
Subject: [56395] Harvey Wells Antenna Tuner
Message-ID: <055d01bf3368\$0ef1b480\$228ae3a5@workstation>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Anyone have a manual for Harvey Wells Z-match tuner they'd be willing to sell me a copy of? I have an opportunity to pick one up, but it doesn't have the manual.

Tnx

73 de K6JMB
Jim Boyle
Santa Cruz, California
FISTS #6537 QRP-1 #1845

Date: Sat, 20 Nov 1999 10:54:26 EST
From: K4NK@aol.com
To: qrp-1@lehigh.edu
Subject: [56396] SWAP...VHF for QRP
Message-ID: <0.e0c9ef7.25681e32@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

Gang;

I was out in the garage (doubles as work shop for QRP), And while digging around I opened a box and found a Motorola model 1350C watt meter with 5 sensors. Now most of the sensors are dups but it covers 25 thru 550mhz with snap in sensors. This item is quite expensive if you were to buy it new ...around \$500.....but I'll never use it so how about a swap for QRP Kit or rig of some kind. Thanks and please E-mail direct only.

73 72 Les K4NK

Date: Sat, 20 Nov 1999 11:53:13 EST
From: N10DL@aol.com
To: qrp-1@lehigh.edu

Subject: [56397] Paper logging
Message-ID: <0.d88cb1c4.25682bf9@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

If you are still using paper logs as I do, check out the log sheets on the Fists web page at <http://www.fist.org>. Sure helps me keep track of my FISTS member contacts much easier. Works great for normal logging also.

Aron
N10DL
Bedford, NH

Date: Sat, 20 Nov 1999 12:09:40 -0500
From: sergio <sruiz@bright.net>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [56398] i am testing on 40..
Message-ID: <3836D5D4.800535D8@bright.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

this is sergio, kb8qpt again..

i will be sending a couple (a bunch) of cq's in the neighborhood of 7040 for the next hour or so (it's 1700z now)..

if i can't get back to me, can you email me at sruiz@bright.net if you hear me?

thanks!

i replaced the cold water ground with a counterpoise.. and am wondering if it will help..

--

peace,
sergio

<http://www.bright.net/~sruiz> - "the village buzz"
"quoting other people is really lame and unoriginal..." -sergio

Date: Sat, 20 Nov 1999 11:19:49 -0600
From: "Ronald H. Evans" <rhevans@mindspring.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [56399] My New Wal-Mart Deep Cycle Battery Power Supply.
Message-ID: <005701bf337b\$8a617520\$5c95cdcf@hal>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I needed a new 13.75 Volt power supply for my radios so the little cartoon light bulb flashed in Wal-Mart and I walked out with one of their deep cycle trolling batteries, their fully automatic model PP1.5A Everstart Battery Tender, and a rubber maid box with cover to hold the battery. The idea of course is to have a power supply for my main rig (TS-850SAT) that would allow me to operate for a couple of days after Y2K hits.

I have never used this setup before having always used a 110V or 220V to 13.75V power supply. Is there any down side to this? 72, Ron, K4KTB, Tulsa, OK.

Date: Sat, 20 Nov 1999 10:22:20 -0700
From: "Ron Smith" <resmith666@uswest.net>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [56400] Re: Paper logging
Message-ID: <06c201bf337b\$cfb36de0\$0200000a@NET.uswest.net>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

www.fist.org belongs to a German outfit that is not FISTS related.

The correct URL should be:

<http://www.fists.org>

but that doesn't work either. Can anyone else access this site? Could it be that my ISP has a confused DNS?

72

Ron Smith - KD7VD - Boise, Idaho

Date: Sat, 20 Nov 1999 09:23:12 -0800 (PST)
From: Jim Durkin <jimdurkin@yahoo.com>
To: kizerian@ced.utah.edu, Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [56401] Re: Elmer 100: Continous Ham Radio Education (rather long)
Message-ID: <19991120172312.14330.rocketmail@web305.mail.yahoo.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

Is there a program like this to recruit retired people?

73

Jim kt4a

--- Bruce Kizerian <kizerian@ced.utah.edu> wrote:
> Donny
>
> Excellent ideas! Education shouldn't stop when your
> earn your license. In
> fact, it should start long before that. That is why
> I started the ElmeRadio
> project.
>
> Youngsters will start by building the ElmeRadio AM
> Regen. Upon completion,
> they will be rewarded a certificate "entitling" them
> to participate in the
> ElmeRadio ham radio class. Here, they will study for
> the Tech+ or Novice
> test while building a two stage kit, tentatively
> called the ElmerPixie. This
> is an "embellished" Pixie II with a sidetone
> monitor, audio filter, and a
> built-in straight key. (You have to see this key to
> believe it. Built mostly
> from hardware store parts, it, actually, looks like
> a straight key, except
> that it is red, yellow, and blue, the ElmeRadio
> colors, and is designed for
> beginners hands.)
>
> As I mentioned, the kit will be built in two stages,
> first, as a code
> practice oscillator, and, then, after our aspiring
> ham learns his code and
> earns his ticket, it will be "upgraded" to an 80

> Meter Pixie-type
> transceiver.
>
> The course does not end when the license is earned.
> Class members will then
> meet to learn and practice communication skills. At
> first, our QSOs will be
> across the room or parking lot, using a 50 ohm
> resistor for an antenna. As
> the students gain confidence they will expand their
> horizons. Add a wire to
> the resistor and talk to ham friends in the
> community. Put up a "real"
> antenna and talk to the world.
>
> At this point, I will hand them off to Elmer 101 or
> some similar program. As
> you suggest, others could work on more advanced
> programs.
>
> One point being, if we wait around for some kid to
> show interest in radio
> and come to us, we may not be very successful. What
> we need to do is CREATE
> interest in amateur radio, and push the average age
> of amateur operators
> down to, maybe, 22. With the average age of
> operators being somewhere around
> 57 and climbing, the future won't be that rosy
> unless we do something about
> it.
>
> I am very excited about these projects, and hope
> others will be, too.
>
> Stay tuned
>
> Bruce kk7zz
>
>
>
>

Do You Yahoo!?
Bid and sell for free at <http://auctions.yahoo.com>

Date: Sat, 20 Nov 1999 17:23:38 GMT
From: martyw@tn.freei.net (Marty Watt)
To: GElam30092@aol.com
Cc: qrp-1@lehigh.edu
Subject: [56402] Re: [Admin] Leaving town.....
Message-ID: <383ad847.218738537@mail.tn.freei.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: quoted-printable

On Fri, 19 Nov 1999 15:45:53 EST, GElam30092@aol.com wrote:

>Sorry for the crosspost. I've been at work late for the last few nights=
and=20
>haven't had time to be da fox. On top of that, I'll be in Brazil for =
the=20
>next 10 days and will drop off the list until I return.
>
>I am planning to take the K2 with me assuming I can get it all together =
in=20
>time. I'll try to operate next weekend (Nov. 27/28) and possibly the=20
>following Monday too.
>
>(Novice question: does anyone know the bands I'll allowed to operate =
there? =20
>How do I identify myself? I'll be in the state of Sao Paulo and the =
city=20
>too. :-)) Direct replies are appreciated since I'll unsubscribe in a =
few=20
>minutes.)

You need an international permit to operate legally from Brazil. =
Otherwise,
you'll have to get a license from the local authorities upon arrival
(typically the telcom folks or the postal folks).

Here's the IARP information from the arrl web site:

International Amateur Radio Permit -- For US Amateur Operations in some
Central and South American Areas -- allows US Amateurs to operate from =
several
Central and South American countries without seeking a special license or
permit to enter and operate from that country. For a United States =
citizen to
operate an amateur station in a CITELE country, an International Amateur =
Radio
Permit (IARP) is necessary. According to the CITELE Agreement, the IARP =

may be
issued by a member-society of the International Amateur Radio Union
(IARU)--for the US, the IARU member society is the American Radio Relay =
League
(ARRL). The permit describes its authority in four different languages. =
The
ARRL offers this service to US citizens for their use when they travel to
CITEL countries. The ARRL provides this service on a non-discriminatory =
basis,
at no expense to the United States Government. An IARP application is
available here (Adobe PDF file).=20

Classes of license/operation. For US Amateurs, there are two classes of =
IARPs.
Class 1 requires knowledge of the international Morse code and carries =
all
operating privileges (Technician Plus, General, Advanced or Extra class =
US
licensees qualify for Class 1). For foreign amateurs, Class 1 is =
equivalent to
our current Amateur Extra Class. Class 2 does not require knowledge of
telegraphy and carries all operating privileges above 30 MHz. It is,
therefore, equivalent to our current (codeless) Technician Class operator
license. There is no equivalent Class description for the US Novice =
license,
therefore the US Novice license is not eligible.=20

Participating IARP Countries: Argentina, Brazil, Canada, Peru, United =
States
of America, Uruguay, and Venezuela.=20

See also:=20
IARP Application Form for US Amateurs (Adobe PDF file)=20

>Happy Thanksgiving to all. Of all the things I have to be thankful =
for, the=20
>QRP'ers are near the top of the list!

Good luck getting the permit, and if you don't get it I'd leave the radio=
at
home -- without permits, the radio may not be allowed into the country, =
and
you may have a heck of a lot of hassle to get it returned when you leave.

Marty, N5NW
Memphis, Tennessee

Date: Sat, 20 Nov 1999 11:37:26 -0600
From: k5zty@juno.com
To: benmail@erols.com
Cc: qrp-1@Lehigh.EDU
Subject: [56403] Re: Info on The CTHA?
Message-ID: <19991120.114535.-837.2.k5zty@juno.com>
MIME-Version: 1.0
Content-Type: text/plain
Content-Transfer-Encoding: 7bit

The laws of physics have not been repealed. The ARRL Antenna Handbook is still in effect, and there still ain't no free lunch. This thing has sucker written all over it.

Bill, K5ZTY
Houston, TX
k5zty@juno.com

Date: Sat, 20 Nov 1999 09:48:52 -0800
From: Scott Gregson - KC7MAS <emtech@steadynet.com>
To: w7ls@blarg.net, qrp-1 <qrp-1@lehigh.edu>
Subject: [56404] Re: Using Power MOSFET to control motor
Message-ID: <3836DF04.20B49C85@steadynet.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hey, that is exactly what I was trying to build myself. I even looked at the block diagram and saw my exact circuit, divider, coparator, etc, except it is all in the one package. All I have to do is find the "Voltage Detector" I want, and make a resistor divider to make the thing turn off at the appointed time and I've got what I want. It looks like it even has built-in hysteresis.

Thank you!!!!!!

Jim wrote:

>
> Scott,
> You might look at the Motorola MC34164 low voltage reset chip for
> microprocessors. It might just work for what you are trying to do. It is a 3
> terminal TO-92 package that holds one pin low until the top pin 'sees' at
> least 4.5 volts or something like that. It then releases the floating pin to

> go high. You could run the juice to it with a resistor and zener to keep it
> at a max of 5v and use the reset pin to operate a VMOS power fet or
> something like that. Might have to jockey the voltages a bit with resistors
> and such, but it's a start.....
>
> Jim W7LS
>
> Scott Gregson - KC7MAS wrote:
>
> > Man sometimes you work something to death and still don't get it done.
> >
> > I am trying to get a motor to shut off when the voltage coming from the
> > battery gets too low (~8 volts). I talked with my friend Stan Yarema,
> > and he gave me some very good ideas. What we came up with works - sort
> > of, but it isn't really the result I need.
> >
> > What I did was hook up an op-amp as a comparator. Used a 78L05 to
> > provide the reference voltage, and a dividing circuit to lower the
> > signal from the battery. I then took the output from the op-amp to the
> > gate of a IRF510. This works, but... the output from the op-amp drops
> > in proportion to the signal, I need it to drop down below 3 volts in
> > maybe a second. I tried the recommended hysteresis stuff from the
> > application data. I tried a dividing circuit on the output, still takes
> > a couple of minutes for the motor to stall. I say it "stalls" because
> > it really is still getting some power, and the MOSFET is getting warm
> > about then as it dissipates the heat. Basically this goes on until the
> > MOSFET dissipates enough of the remaining battery voltage to really turn
> > itself off.
> >
> > I also tried a LM311, a "real" comparator, but unfortunately it doesn't
> > provide an ouput voltage, but an open collector, so there is no way to
> > trigger the MOSFET in the first place without a whole bunch more
> > components, I have limited space in this application.
> >
> > The Op-amp I used was 1/4th of a MC3404. That is a quad 741 type
> > op-amp. Also tried a TL082 - no worky.
> >
> > This whole thing is run off the battery that is being monitored, so I
> > don't have a -V source with building a voltage pump circuit. I think if
> > I did that, I think that the 741 type op-amp would swing down faster.
> >
> > There are some push-pull output comparators, but the one I found are
> > packaged for surface mount, I need thru-hole.
> >
> > Any ideas?
> > --
> > Scott Gregson - KC7MAS
> > emtech@steadynet.com

> > <http://emtech.steadynet.com>
> > ++++++
> > Scott Gregson Co. / Emtech / CFC
> > 1127 Poindexter Ave W
> > Bremerton, WA 98312

--

Scott Gregson - KC7MAS
emtech@steadynet.com
<http://emtech.steadynet.com>
++++++
Scott Gregson Co. / Emtech / CFC
1127 Poindexter Ave W
Bremerton, WA 98312

Date: Sat, 20 Nov 1999 11:52:13 -0600
From: Glen Reid <k5fx@flash.net>
To: rhevans@mindspring.com
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [56405] Re: My New Wal-Mart Deep Cycle Battery Power Supply.
Message-ID: <3836DFCD.B98E8E7E@flash.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=iso-8859-1
Content-Transfer-Encoding: 8bit

"Ronald H. Evans" wrote:

>
> I have never used this setup before having always used a 110V or 220V to
> 13.75V power supply. Is there any down side to this? 72, Ron, K4KTB,
> Tulsa, OK.

Ron,

Congratulations on your power decision. I have run my ham station,
several different rigs, from a "Sam's Warehouse" deep cycle for several
years.

Just a couple of things to be aware of:

1. Many simple battery chargers use half wave rectifier arrangements
that are very noisy at HF. You may need to turn the BC off while
actually operating.
2. It is hard to "over charge" a big deep cycle battery at a charge
rate of 10% or less of its capacity. Mine is a 105 amp hour model which

I recharge at about a 1 amp rate. Keep the recharge rate as low as possible consistent with your operating power demand and it should last a good while. Mine is about 4 years old and still will charge to about 75% capacity and run my station for several days. I disconnect the BC from the battery during use to isolate the rig from the noise on the AC line.

3. Check your "battery box" for a little ventilation. Deep cycles can vent hydrogen during recharging (they are not "sealed"). In a closed box it can collect near the top and a hydrogen explosion can spoil your whole day, as well as, your battery!

That's about it. I hope your system is as successful as mine.

73

gr

--

GLEN REID
K5FX/M BGF

Austin...in the beautiful hill country of TEXAS...

Austin QRP Club # Pi

Email: k5fx@arrl.net

Date: Sat, 20 Nov 1999 12:58:47 -0500
From: "T.J. \"SKIP\" Arey N2EI" <tjarey@home.com>
To: "njqrp@njqrp.org" <njqrp@njqrp.org>, "qrp-1@Lehigh.EDU" <qrp-1@Lehigh.EDU>
Subject: [56406] 2n2/40 parts substitution question
Message-ID: <3836E157.889CAB9D@home.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

D5 calls for a 1N4735A 6.2V 1 Watt Zener

I have some 6.0V 500mw 1N5233B Zeners laying around. Do you folks think I can sneak one of these puppies in place of the 1N4735A and get away with it??? I guess the technical question is the voltage or the power more critical in the application?

--

+++++

T.J. "SKIP" AREY N2EI e-mail tjarey@home.com

Website <http://members.home.net/tjarey>

Snail Mail: PO Box 236, Beverly, NJ 08010

Specialization is for insects! LAZARUS LONG

Date: Sat, 20 Nov 1999 13:05:16 -0500
From: Hank Kohl K8DD <k8dd@arrl.net>
To: resmith666@uswest.net
Cc: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [56407] Re: Paper logging > www.fists.org
Message-ID: <4.1.19991120130222.00cc3cd0@192.0.0.6>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

At 10:22 AM 20-11-99 -0700, Ron Smith wrote:
>www.fist.org belongs to a German outfit that is not FISTS related.
>
>The correct URL should be:
>
><http://www.fists.org>
>
>but that doesn't work either. Can anyone else access this site?
Could it
>be that my ISP has a confused DNS?
>
>72
>
>Ron Smith - KD7VD - Boise, Idaho

I'm getting 425'd on it.
DNS says www.fists.org is 205.167.97.4
Can't tracert or ping it.
Must be down at the moment.

73 Hank K8DD

*/ Hank Kohl K8DD k8dd@arrl.net
*/ ARRL TS <http://www.tir.com/~k8dd>
*/ MI-QRP - Vice Pres. QRP-ARCI - Director
*/ G-QRP ARRL/LM QCWA/LM QCAO/LM

Date: Sat, 20 Nov 1999 13:13:58 -0500
From: "John J. McDonough" <jjmcd@tm.net>
To: <tjarey@home.com>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [56408] Re: 2n2/40 parts substitution question
Message-ID: <001f01bf3383\$05d8f460\$010044c0@conor-mac-nessa>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Skip

The 1N4735A sets the tuning range for the VFO. With the slightly lower voltage there will be a slightly smaller tuning range. Also, you may end up adding a turn to L1 (tho I doubt it).

72/73 de WB8RCR <http://www.qsl.net/wb8rcr/>
didileydadidah QRP-L #1446 Code Warriors #35

-----Original Message-----

From: T.J. "SKIP" Arey N2EI <tjarey@home.com>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Date: Saturday, November 20, 1999 12:59 PM
Subject: 2n2/40 parts substitution question

>D5 calls for a 1N4735A 6.2V 1 Watt Zener

>

>I have some 6.0V 500mw 1N5233B Zeners laying around. Do you folks think

>I can sneak one of these puppies in place of the 1N4735A and get away

>with it??? I guess the technical question is the voltage or the power

>more critical in the application?

>

>--

>+++++

>

> T.J. "SKIP" AREY N2EI e-mail tjarey@home.com

>

> Website <http://members.home.net/tjarey>

>

> Snail Mail: PO Box 236, Beverly, NJ 08010

>

> Specialization is for insects! LAZARUS LONG

Date: Sat, 20 Nov 1999 13:45:25 EST
From: KF4EIB@aol.com
To: tenten-1@lehigh.edu
Cc: qrp-1@lehigh.edu, tentec@contesting.com, cw@qth.net
Subject: [56409] WTB: Super CMOS 3 Keyer kit
Message-ID: <0.b2c9835e.25684645@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

Greetings to all,

Posting this for a friend...
Looking to buy a Super CMOS 3 Keyer kit
Reply to his e-mail please:

DBrown@RFMD.Com

Thanks and take care.

73,

Gordon kf4eib / aa (Just passed my advanced ticket.. :-))

Date: Sat, 20 Nov 1999 14:04:50 EST
From: kc8aon@juno.com
To: qrp-1@Lehigh.EDU
Subject: [56410] N4UY on his "Tuna Tin 2"
Message-ID: <19991120.140457.4479.8.kc8aon@juno.com>

Worked Jake - N4UY today on 7.042 on his "Tuna Tin 2" @ 400mW, sounded real gud Jake except for the QSB here
(Southern tip of Ohio). I was using my Yaesu FT-757GX cranked down to abt 5 watts into my homebrew verticle, cranked it down to abt a watt during the QSO and Jake didn't seem to notice ! Sez a lot for QRP !
Sure hope to have my 6V6 transmitter finished before winter is over with
!

72.....kc8aon
Rick McKee <><
Willow Wood, Ohio

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Date: Sat, 20 Nov 1999 12:39:39 EST
From: kc8aon@juno.com
To: rhevans@MINDSPRING.COM, qrp-1@Lehigh.EDU
Subject: [56411] Re: My New Wal-Mart Deep Cycle Battery Power Supply.
Message-ID: <19991120.140457.4479.5.kc8aon@juno.com>

Just use QRP power levels, and you can run the rig "almost" forever !
And how about one of the little solar battery maintainers from Radio Shack to keep the battery topped off when the AC power fails ? A friend of mine uses a deep cycle battery / solar maintainer to operate a 2 meter station and a home weather station. At my QTH, I use a deep cycle battery that is maintained by the station power supply. This way the battery gets a charge whenever the power supply is on. I just use a 6 amp rectifier diode between the battery and supply to keep the battery from discharging into the supply when the power is off. I also have a toggle switch to select the power supply or the battery, so whenever the AC power goes off, I just flip a switch and the station is back on the air ! I also have several gel cel batteries around just in case !

73.....kc8aon
Rick McKee <><
Willow Wood, Ohio

On Sat, 20 Nov 1999 11:19:49 -0600 "Ronald H. Evans"
<rhevans@mindspring.com> writes:
>I needed a new 13.75 Volt power supply for my radios so the little
>cartoon
>light bulb flashed in Wal-Mart and I walked out with one of their deep
>cycle
>trolling batteries, their fully automatic model PP1.5A Everstart
>Battery
>Tender, and a rubber maid box with cover to hold the battery. The
>idea of
>course is to have a power supply for my main rig (TS-850SAT) that
>would
>allow me to operate for a couple of days after Y2K hits.
>
>I have never used this setup before having always used a 110V or 220V
>to
>13.75V power supply. Is there any down side to this? 72, Ron, K4KTB,

Message-ID: <3836F455.41CB6D49@bright.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

can i just give out contacts for the doghouse contest? mebbe more people
will hear me if i am shelling out contacts, no?

--

peace,
sergio
<http://www.bright.net/~sruiz> - "the village buzz"
"quoting other people is really lame and unoriginal..." -sergio

Date: Sat, 20 Nov 1999 11:44:27 -0800
From: Mighty Mik <mitymik@wenet.net>
To: "qrp-1@Lehigh.EDU" <qrp-1@Lehigh.EDU>
Subject: [56414] source needed for 16+ MHZ xtals.
Message-ID: <3836F9B8.1CED1302@wenet.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

DAN's *had* some 16.689 MHZ xtals, but ran out of them before i could
get any. Does anyone have a source for similar xtals around that freq? (
i'd like to get as close to 16.708 as possible)

--

@@
72/73 de Mick, WD8MNV/6 QRP-L #1673 QRP-C #118 ZOMBIE #441
NC20 SWL40+ ZM-2 DSP-3 rocket scientist and a 6 meter wanna be.
Aeropac #111 Tripoli #3071 Level 2 GRID CM87

Date: Sat, 20 Nov 1999 13:58:49 -0600
From: k5zty@juno.com
To: KF4EIB@aol.com
Cc: qrp-1@Lehigh.EDU
Subject: [56415] Re: WTB: Super CMOS 3 Keyer kit
Message-ID: <19991120.140001.-837.7.k5zty@juno.com>
MIME-Version: 1.0
Content-Type: text/plain
Content-Transfer-Encoding: 7bit

SASE to Idiom Press , Box 1025, Geyserville CA, 95441-1025 will get you a catalog on the complete keyer or the semi kit.

Bill, K5ZTY
Houston,TX

Date: Sat, 20 Nov 1999 13:52:13 -0600
From: k5zty@juno.com
To: kc8aon@juno.com
Cc: qrp-1@Lehigh.EDU
Subject: [56416] Re: Z- match verses T- match
Message-ID: <19991120.140001.-837.6.k5zty@juno.com>
MIME-Version: 1.0
Content-Type: text/plain
Content-Transfer-Encoding: 7bit

There is a very good article in the July '95 QRP Quarterly by Charlie Lofgren,W6JJZ, that pretty well explains the Z match and it's origins and how to build one. In my opinion, it out performs the T match in any circumstance with no band swithching needed. I don't understand why there isn't a commercial version of it except that the variable capicators are very large for a high power model. At QRP levels to about 100 watts you can use receiving variables.
Great tuner.

Bill, K5ZTY
Houston,TX
k5zty@juno.com

Date: Sat, 20 Nov 1999 13:11:04 -0700
From: Bruce Kizerian <kizerian@ced.utah.edu>
To: qrp-1@Lehigh.EDU
Subject: [56417] ELMER101: ElmeRadio Update
Message-ID: <38370058.693B8B23@ced.utah.edu>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

The instruction manual for the ElmeRadio AM Regen kit is in the printing stage. There has been a slight delay while I find a satisfactory color printer for the middle pages. A few beta kits will then be sent out to some freinds who will give the project the "acid test."

In a few days, I will be making the manual available, via snail mail, for a small nominal cost (meaning, I'll only lose a little bit on each one sent.) Give me time to digest the turkey, and things will finally start to happen.

Happy Thanksgiving. We, truly, are a blessed and fortunate bunch!

Bruce kk7zz

Date: Sat, 20 Nov 1999 15:17:55 -0500
From: "George Heron N2APB" <n2apb@erols.com>
To: "NJQRP" <NJQRP@njqrp.org>, <kc8aon@juno.com>, "QRP-L" <qrp-l@Lehigh.EDU>
Subject: [56418] Re: Z- match verses T- match
Message-ID: <002001bf3394\$63d73d90\$d698accf@gherons_box.ire.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

The Z-match indeed is a nice and flexible design. I've built one into a box matching my Sierra transceiver, and built into its front panel the colorful LED SWR meter portion of the Rainbow Tuner kit from a couple of years ago.

You can see an online reprint of the original author's article, and a construction experience of one of our club members, at the NJ-QRP website. We have a section called "Member Projects" which chronicles some of our various projects and you can see the Z-Match details at a link on the Projects page at <http://www.njqrp.org/mbrproj/mbrproj.html>

Good luck! It's a nice tuner.

73, George N2APB
n2apb@amsat.org in Baltimore, MD

> I am in the dark about the Z-match, I have looked in all my ARRL
> handbooks, Antenna Handbooks, QRP books, and can find nothing on a
> Z-match. [... Snip ...]

Date: Sat, 20 Nov 1999 16:00:09 -0500
From: Russ Hines <radioruss@fuse.net>

To: we6w@qsl.net
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [56419] Re: Logarithms and QRP
Message-ID: <38370BD9.9599AA12@fuse.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Here's a trick I use to recall logarithms. You won't get a precise solution using this method, but it allows you to make a pretty good guess.

Begin by remembering these two main concepts:

- 1)The base-10 exponents... 1 is 0, 10 is 1, 100 is 2, 1000 is 3, etc.
- 2)The power ratio formula expressed in dB

$$\text{Power(in dB)} = 10 \times \log(\text{ratio})$$

or, specifically, that a 2X change in power is approximately +3dB, and 1/2 power change is approximately -3dB.

>From these concepts, you can estimate the following logarithms:

log 1 = 0
log 2 = .3 (remember the power formula above)
log 4 = .6
log 8 = .9
log 10 = 1
log 20 = 1.3 (2 times 10, add the log of 10 to the log of 2)

For numbers between 0 and 1, the log of the number (or fraction) is the log of its inverse with a change of sign. For example, the log of .5 is approximately -.3 (.5 is the same as 1/2, or the inverse of 2). Similarly, the log of .25 (or one quarter, the inverse of 4) is -.6, and the log of .125 (1/8) is -.9.

Happy "guess-timating." ;-)

73,
Russ
WB8ZCC

Ed Loranger wrote:

>
> Good Morning and Happy Friday to all our QRP family.
>
> I've been forcing myself to solve mismatch error problems
> in my head lately. I have got it down pretty good except
> for the logarithms.

>
> I know how to do square roots via pencil and paper using
> longhand, but I never learned any techniques for
> logarithms.
>
> This is QRP as it is associated to measurements and
> associated mismatch errors.
>
> Does anyone know of a NON-Computer/Calculator approach
> to solving LOGARITHMS?
>
> Goal: pencil and paper solutions.
>
> Thanks! 72/Ed we6w
>
> --
> -72/Ed WE6W; AR Millennium Q's=> 2239/2000 A-1 OP
> <http://www.qsl.net/we6w> Santa Rosa, CA
> QRP-Z#106 AR#112 HI-QRP#64 ARCI#9397 ARS#275 QRP-L#1068 Old NC#2227

Date: Sat, 20 Nov 1999 16:08:12 EST
From: BOBOBOB1@aol.com
To: qrp-1@lehigh.edu (Low Power Amateur Radio Discussion)
Subject: [56420] Sweepstakes contest software//HELP
Message-ID: <0.30ee24a8.256867bc@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

a year or so there was a guy that was offering his software for Sweepstakes logging..
Anyone know where I can get a copy of it to down load from the web??

Bob Gorman
WA1SCH

Date: Sat, 20 Nov 1999 16:47:36 EST
From: K4NK@aol.com
To: qrp-1@lehigh.edu
Subject: [56421] More SWAP for QRP
Message-ID: <0.c422bac2.256870f8@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

Well Gang;

I found some more goodies to swap for QRP items. I have 200+++ radio tubes ./ These are mostly all new old stock (NOS). Mostly minitures like 6ak5 ,12au7 etc.. Probably never use any of these ..so....what am I offered. Preference on QRP unbuilt kits but i'm open.

72 Les K4NK

Date: Sat, 20 Nov 1999 18:03:34 -0800
From: Dana E Hager <dehager@ix.netcom.com>
To: "qrp-1@Lehigh.EDU" <qrp-1@Lehigh.EDU>
Subject: [56422] Leader LB0-516 manual
Message-ID: <383752F6.EF1ADBD5@ix.netcom.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Picked up a Leader LB0-516 scope at a hamfest w/ no manual or probes.
Any help in finding accessories would be of great help.

Thank you,

Dana

Date: Sat, 20 Nov 1999 18:02:51 EST
From: BOBOBOB1@aol.com
To: qrp-1@lehigh.edu (Low Power Amateur Radio Discussion)
Subject: [56423] Sweepstakes Software!! Thank you!
Message-ID: <0.3de2a377.2568829b@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

Thanks Guys....
Got all of your email!!
Boy this is some reflector!!
I am on my way!1
Bob Gorman
WA1SCH

Date: Sat, 20 Nov 1999 18:30:01 -0500
From: Nils R Young <nilsbull@juno.com>

To: QRP-L@lehigh.edu, elecraft@qth.net
Subject: [56424] More Mr. Microphone stuff
Message-ID: <19991120.183009.-963797.0.nilsbull@juno.com>
MIME-Version: 1.0
Content-Type: text/plain
Content-Transfer-Encoding: 7bit

Gangs,

I got up this morning, after having had an hour long LNR session with the former OVTN lunatics on Friday night, and had great plans. I don't remember what they were, but I ended up on 28.715 & heard John (K7FD). We had a short QSO & he suggested that I get some real antennas.

Sounds good to me. I'll add another tower section to my Christmas wish list.

Then I started messing with electret mic elements again. I'd gone over to Roger's (Midwest Surplus) & had picked up some stuff for mobile, including a speaker & mic combination that was designed for "hands-free" cell phone driving or something like that.

The speaker works nice. Has a less tinny sound than a smaller speaker in an aluminum box.

The mic, however, was another story. Turns out that it was (as suspected) an electret element, but it was hosed to a board with lots of SMD stuff & a couple caps. I hooked it up directly to the TR7 & found that (a) the circuit board is some sort of preamp/compressor doodad that kicks the TR7 to full-tilt without much vocal effort on my part and (b) the board & element arrangement are useless with the K2 'cause the K2 has plenty of AF gain for these electret mics elements.

So the element came off the board & was duly placed in the innards of a \$4 carbon mic body which I'd also picked up at Roger's. Brand new, in the original Japanese box. Anyway, that gives me a serious mobile mic with a PTT switch, the PVC mic (with no switches) & the rehabilitated Sears Silverton mic body that now also works with the TR7 & the K2.

What I've noticed about these elements is that some of them seem to be a little more sensitive than others. I've used the 2.7k resistor in series with the +5 V line in the K2 (and one cobbled into the TR7 via the mother board power buss). I guess it's the other end of the AF output vs headphone impedance & c problem.

And the (former carbon element) mobile mic has a neat little gold medalion on it. Makes me feel like Broderick Crawford.

73

Nils

. . . the LNR loonies were strategizing for SS . . . I thought about spending some time playing CW . . . but I'm still waiting to play mobile SSB . . . which is another story . . .

Nils R. Bull Young -- El Gringo Errante -- La Estancia de los Guajolotes Sonrientes

<http://home.fiberia.com/wb8ijn> -- WB8IJN --

<http://members.xoom.com/nilsbull>

"In my day you had to FIGHT to have oligarchs! Every day was a STRUGGLE!

-- Comrade Sergei Nikolaevich McTovarishov --

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Date: Sat, 20 Nov 1999 18:58:12 -0500 (EST)

From: James Skalski <jskalski@localnet.com>

To: qrp-l@Lehigh.EDU

Subject: [56425] WTB small DPDT relays

Message-ID:

<Pine.LNX.4.20.9911201848320.1730-1000000@valhalla.valhalla.buffalo.edu>

MIME-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

I need some T0-5 relays to switch some first i.f. filters.

I need six of them. They will be used to "sherwoodize" my other drake receiver. Will buy or trade for them. If you have ten of them I would trade a new straight key for them.

73,

Jim n2go

End of QRP-L Digest 1645
